

**Potential medicinal value of some South African seaweeds**

Stirk WA, Schwalbl AN, Light ME, Medkova J, Lenobel R, Strnad M, van Staden J

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Abstract:

Eleven macroalgae were collected from the KwaZulu-Natal coast and nineteen species from the cooler Western Cape coast in March and April 2000. Ethanolic and aqueous extracts were made and tested for biological activity in the Cox-1 anti-inflammatory assay, in a nematode mortality bioassay for anthelmintic activity, an IC50 anticancer assay and a MIC antimicrobial assay. The ethanolic extracts were very active in the Cox-1 anti-inflammatory assay for almost all of the species tested. The aqueous extracts were not active. No anthelmintic mortality was detected in extracts from any of the species tested. Many of the extracts had cytotoxic activity against three **cancer** cell lines tested, with those from representative species of the Chlorophyta and Rhodophyta being the most effective. The extracts had much lower cytotoxic activity when tested on normal mouse fibroblasts (NIH3T3). Extracts from only a few species had antimicrobial activity with those of the Chlorophyta tested being the most effective against both the Gram-positive and Gram-negative bacteria.